

### **Remarks**

Claims 15, 18, 19, and 55-60 are pending in the application. Claims 1, 18, and 19 have been amended. Claim 17 has been canceled. Support for the claim amendments can be found throughout the application, including the claims as originally filed. Importantly, no new matter has been added to the claims. Further, the amendments to the claims should not be construed to be an acquiescence to any of the rejections. Rather, except where another rationale is explicitly provided, the amendments to the claims are being made solely to expedite the prosecution of the above-identified application. Moreover, the Applicant reserves the right to further prosecute the same or similar claims in subsequent patent applications claiming the benefit of priority to the instant application. 35 USC § 120.

### **Claim Objections**

Claims 17-19 were objected to under 37 CFR 1.75(c) based on the Examiner's contention that the claims are of improper dependent form for failing to further limit the subject matter of the previous claim. In order to expedite prosecution, claims 18 and 19 were amended so that each are independent method-of-use claims. Support for the claim amendments can be found in the claims as originally filed. Claim 17 was canceled in order to expedite prosecution.

### **Claim Rejections Based on 35 USC § 112¶1**

Claims 15, 17-19, and 55-60 stand rejected under 35 U.S.C. § 112¶1, based on the Examiner's contention that they contain "subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." The Examiner contends that there is "insufficient support for the newly recited generic [structure] which encompasses a wide variety of compounds outside of those presented in Figure 9."

In order to expedite prosecution, the Applicants have amended claim 15 to map more closely the compounds listed in Figure 9. The Applicants respectfully contend that the disclosure of a carboxylic acid substituent, e.g,  $R_1 = CO_2H$ , provides sufficient support for the fact that the substituent might also be an ester or amide group. Carboxylic acid, ester, and amide groups are structurally similar, i.e., each have a  $C=O$ , the carbon atom of the carbonyl group is  $sp^2$  hybridized, and the oxidation state of the carbonyl-carbon atom is the same for each. In fact, ester and amide groups are often referred to as carboxylic acid derivatives. For example, P. Y. Bruice states in an introductory chemistry textbook that “acyl halides, acid anhydrides, *esters*, and *amides* are all called carboxylic acid derivatives because they differ from a carboxylic acid only in the nature of the group that has replaced the OH group of the carboxylic acid.” See Organic Chemistry 2<sup>nd</sup> Ed. Ed. Bruice, P. Y. New Jersey: Prentice Hall, 1998, pp 674. Further, carboxylic acids, esters, and amides are discussed in the same chapter of introductory organic chemistry textbooks because of their similar structure features and reactivity. Therefore, the Applicants contend that one of ordinary skill in the art readily associates esters and amides with carboxylic acids, and that disclosure of a carboxylic acid provides sufficient support for the narrow range of esters and amides defined in amended claim 15.

In regards to the amended definitions of  $R_2$  and  $R_3$ , the Applicants contend that the disclosure of a fluoride substituent provides sufficient support for the fact that the substituent may be chloride, bromide, or iodide because all of these groups are halogens. One of ordinary skill in the art recognizes that fluoride is a halogen, and readily appreciates that chloride, bromide, and iodide can be used interchangeably in many circumstances. Therefore, the Applicants contend that disclosure of fluoride is sufficient support for chloride, bromide, and iodide.

Accordingly, the Applicants respectfully request withdrawal of the rejections of claims 15, 17-19, and 55-60 under 35 U.S.C. § 112¶1.

**Conclusion**

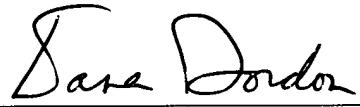
In view of the above amendments and remarks, the Applicants believe that the pending claims are in condition for allowance. If a telephone conversation with Applicant's Attorney would expedite prosecution of the application, the Examiner is urged to contact the undersigned.

Respectfully submitted,  
Patent Group  
Foley Hoag LLP

Foley Hoag LLP  
155 Seaport Boulevard  
Boston, MA 02210

Telephone: (617) 832-1000  
Telecopier: (617) 832-7000

Date: 2/25/04

By:   
Dana M. Gordon, PhD  
Reg. No. 44,719  
Attorney for Applicants